# EMS: Stroke Care Not just a ride to the hospital

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# Objectives:

- Review case from beginning to end
- Review current guidelines for acute stroke/TIA patients pre hospital care
- Putting it all together
- Where do we need to go?

#### The Call

- The public must be educated to call for help at the first signs of a STROKE.
- Dispatchers must be trained to interpret the simple signs of the caller as a possible stroke.
- Most 911 centers must now train their personnel in EMD.
- Must make training specific.....

# The Dispatch

- Dispatchers should use Key Pre Designated Questions to help with the diagnosis of a possible stroke patient.
- This takes:
- 1. Training
- 2. Time
- 3. Training

# The Dispatch

- > BLS vs. ALS
- The Ambulance Crew should be dispatched promptly and should respond emergently.
- The Ambulance personnel should be advised that they are responding to a possible stroke patient at time of dispatch.
- Can the hospital be notified by the Dispatcher?

#### Arrival

- The crew should start evaluation upon arrival.
- Are there any life-threats?
- Responsiveness/Appearance
- A-airway maintain
- B-breathing
- Is there a need for oxygen?
- > C-circulation
- Monitor the vital signs.

#### What else do we see?

- D-disabilities
- Does the patient have any deficits?
- > Cincinnati Stroke Scale
- If positive for possible stroke determine time of onset.
- Determine medical history
- > Time = Brain

#### Time

- Recommended that we stay in a 3-hour window.
- EMS must determine the exact time of onset as accurately as possible and also note the last time patient was seen "normal".
- Need transport to receiving facility within a 2-hour window of onset (if possible).
- Take a family member or friend

# Pertinent patient facts

- S-signs and symptoms
- > A-allergies
- M-medications
- P-pertinent medical history and/or conditions
- > L-last oral intake
- E-event/time patient last seen/encountered without any deficits

#### ENROUTE

- Perform blood glucose (if available)
- > IV (if available)
- EKG monitoring (if available)
- Perform Thrombolytic Checklist
- Document findings
- Contact receiving facility
- Reassure and comfort patient throughout...

# Arrival at Facility

- All pertinent information must be passed along
- Help with transition from pre-hospital to hospital care
- Answer any questions
- > Paperwork
- > REMEMBER: NOTIFICATION IS VERY IMPORTANT.

#### Seven D's

- 1. Detection
- 2. Dispatch
- 3. Delivery
- 4. Door
- 5. Data
- 6. Decision
- 7. Drug

#### TEAM APPROACH

- > Detection
- Importance of early recognition of stroke s/s by the public
- Dispatch (911 system)
- Asks the right questions and identifies the need for urgent response
- Delivery (EMS)
- Assesses patient, treats life-threats, obtains symptom onset, minimizes on-scene time, immediate transport and notifies receiving facility

#### TEAM APPROACH

- Door
- Alerts stroke team (if available), performs patient exam & assessment, rapid CT scan
- > Data
- Reviews all pertinent patient information
- Decision
- Determination made about the use of fibrinolytics
- > Drug
- Administration of treatment and monitoring

# Follow-up

- Remember to:
- 1. Keep EMS in the loop
- Play a critical part in Stroke Patient Plan of Treatment
- 3. Group Training
- 4. Discussion
- 5. TEAM

# Pre-hospital Care

#### **DISPATCH RESPONSIBILITIES:**

- 1. Recognize the seriousness of strokes
- 2. Properly question callers
- 3. Send closest ambulance
- 4. Determine patient history and time of onset of stroke symptoms; relay pertinent information to the responding crew
- 5. Obtain feedback

# Pre-hospital Care

#### **EMS RESPONSIBILITIES:**

- 1. Respond rapidly
- 2. Assess patient
- 3. Treat any life-threatening conditions
- 4. Perform Cincinnati Stroke Scale
- 5. Determine on-set
- 6. Medical history and medications
- 7. Treat per protocol
- 8. Limit on-scene time
- 9. Transport high priority
- 10. Obtain feedback

# What's Next

- Assessing the needs
- Education specifically geared toward discipline
- > Public Education
- Working together
- Medical Direction
- > Protocols

#### QUESTIONS?

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